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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,051	06/20/2001	Heikki Einola	PM 276663	7538

909 7590 08/02/2005

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EXAMINER

DAGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/762,051	<b>Applicant(s)</b> EINOLA ET AL.	
	<b>Examiner</b> Stephen M. D'Agosta	<b>Art Unit</b> 2683	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.  
2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-11 and 14-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 2-11 and 14-18 is/are allowed.  
6) ☒ Claim(s) 19 and 20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

A new office action is found attached in response to the applicant's RCE filed July 15<sup>th</sup> 2005. Claims 2-11 and 14-18 are allowed. Claims 19-20 are rejected due to the fact that they are broadly written and read on the prior art cited.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 19-20** rejected under 35 U.S.C. 103(a) as being unpatentable over Nessett et al. US 6,766,453 and further in view of Obayashi et al. US 5,564,077 and Schuster et al. US 6,857,072.

As per **claims 19-20**, Nessett teaches a network part in a first mobile communication network configured to use a first cipher key for ciphering traffic between the first mobile communication network and a mobile station, wherein the network part is configured to calculate, as the mobile station operates in the first mobile network (title, abstract, C1, L29 to C2, L33),

the network part is further configured to transmit information necessary for calculating the second cipher key from the first mobile communication network to the mobile station (C2, L40 to C3, L36 teaches interaction between a mobile user and the network's RADIUS server download of a key to the user from the server/network),

**but is silent on** a second cipher key to be used for ciphering in a second mobile communication network,

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the network part is configured to transmit the second cipher key to the second mobile communication network to be used for cipher traffic after the handover using the second cipher key, and

the network part is configured to transmit a request to the mobile station for handover to the second mobile communication network.

The primary examiner notes that a new key will inherently be required should either the network change (eg. mobile user roams into a new service area) and/or a connection is made to a different end user (eg. call a new/second person).

**Obayahsi** teaches a dual mode phone that can switch between analog and digital systems (title, abstract). Inherent to this operation from one mode to another is all the underlying switching that must occur to allow the phone to switch internal hardware configurations as well as change RF channels (figures 15-16 and 18 show "switching processing"). Obayahsi also teaches handoff support (see figure 11). Hence, one skilled understands that using Nessett's encryption scheme in a phone that can roam to different networks will require Nessett's system to send a new key to the second network if the phone is to continue operating in a secure mode in said second network.

Further to this point is **Schuster** who enables encryption/authentication of a telephony network (figures 1-2 and 8-10) between users that connects over multiple networks (figure 1 shows first access network #112, data network #106 and second access network #114).

**With further regard to claim 20**, Nessett discloses at least three well known techniques for authentication (C1, L30 to C2, L33). The techniques disclose that either the user or network can calculate cipher keys and/or perform ciphering calculations, which reads on the mobile calculating a second key and transmitting it to the second network.

It would have been obvious to one skilled in the art at the time of the invention to modify Nessett, such that a second cipher key to be used for ciphering in a second mobile communication network AND the network part is configured to transmit the second cipher key to the second mobile communication network to be used for cipher

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traffic after the handover using the second cipher key AND the network part is configured to transmit a request to the mobile station for handover to the second mobile communication network, to provide for a user to change to a different encryption means while they roam to different networks.

### ***Allowable Subject Matter***

**Claims 2-11 and 14-18** are allowed since the applicant has amended per the primary examiner's recommendations. These claims, in the examiner's opinion, recite novel limitations.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Rune 5,850,444
2. Zuili et al. US 6,145,084
3. Murphy et al. US 6,314,468

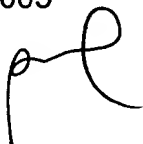
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta  
Primary Examiner  
7-22-2005

A handwritten signature in black ink, appearing to be 'SD' or similar, located below the printed name and date.